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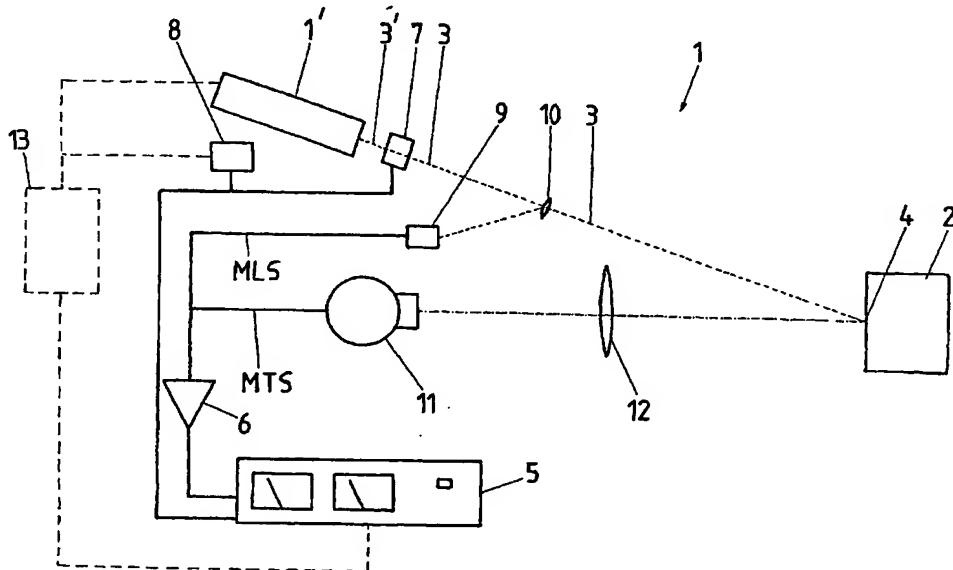
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(54) Title: METHOD AND SYSTEM FOR MEASURING THE THERMAL DIFFUSIVITY



(57) Abstract: The present invention concerns a method and a system for measuring the thermal diffusivity. Said method comprises the steps of: - subjecting a surface region of an object to a modulated heating beam (3) while providing a signal (MLS) thereof, the heated spot or area (4) of the surface of the sample (2) having a definitive diameter and a fixed intensity distribution profile; - providing a signal (MTS) proportional to the temperature of the heated spot area (4); - determining the phase difference between the modulated beam signal (MLS) and the resulting modulated temperature signal (MTS); - using said determined phase difference and the associated frequency to work out the thermal diffusivity value of said object (2).

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## INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 7 G01N25/18 G01K17/20

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
 IPC 7 G01N G01K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 713 665 A (KATO HIDEYUKI ET AL) 3 February 1998 (1998-02-03) claims 1,2	1-10
A	THOMAS S ET AL: "THERMAL DIFFUSIVITY OF SOLIDS BY PHOTOACOUSTIC CELL ROTATION AND PHASE LAG MEASUREMENT" REVIEW OF SCIENTIFIC INSTRUMENTS, AMERICAN INSTITUTE OF PHYSICS, NEW YORK, US, vol. 66, no. 7, 1 July 1995 (1995-07-01), pages 3907-3908, XP000524293 ISSN: 0034-6748 the whole document	1-10
A	US 5 586 824 A (BARKYOUUMB JOHN ET AL) 24 December 1996 (1996-12-24) column 4, line 9 - column 5, line 20; figure 3	1-10

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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- \*&\* document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the International search report
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Information on patent family members

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